

IN THE CLAIMS:

Claims 10, 12, 19, and 20 have been cancelled. Claims 1-9, 11, 13, 14, 17, 18, 21-24, and 26 have been amended herein. Claims 27 and 28 have been added herein. All of the pending claims 1 through 28 are presented below. This listing of claims will replace all prior versions and listings in the application. Please enter these claims as amended.

1. (Currently Amended) A method for forming a contact interface, comprising:
providing a substrate including semiconductor material with at least one contact comprising semiconductor material protruding from ~~said~~ the substrate;
forming a ~~first~~ layer comprising dielectric material over ~~said~~ the semiconductor material and ~~said~~ the at least one contact;
forming a ~~second~~ layer comprising polysilicon a silicide contact over ~~said~~ the first layer comprising dielectric material and over at least a portion of a lateral surface of ~~said~~ the at least one contact; ~~and~~
forming a silicide contact at least an interface between said electrically conductive silicidable material and said second layer, including at said portion of said lateral surface.
2. (Currently Amended) The method of claim 1, wherein ~~said~~ forming ~~said~~ the first layer comprising dielectric material comprises forming silicon dioxide.
3. (Currently Amended) The method of claim ~~1~~ 27, further comprising:
forming a ~~third~~ layer comprising barrier material over ~~said~~ the second layer comprising polysilicon.
4. (Currently Amended) The method of claim 3, wherein ~~said~~ forming ~~said~~ the third layer comprising barrier material is effected before ~~said~~ forming ~~said~~ the silicide contact.

5. (Currently Amended) The method of claim 4, further comprising:
exposing at least a portion of ~~said the second-layer comprising polysilicon~~ located over ~~said the~~ at
least one contact, including at least a portion of ~~said the second-layer comprising~~
polysilicon located over at least ~~said the~~ portion of ~~said the~~ lateral surface of ~~said the~~ at
least one contact through at least ~~said the third-layer comprising barrier material~~.

6. (Currently Amended) The method of claim 3, wherein ~~said-forming said the third~~
layer comprising barrier material comprises forming a layer comprising at least one of titanium
nitride, tungsten nitride, tungsten silicon nitride, and titanium silicon nitride.

7. (Currently Amended) The method of claim 3, further comprising forming ~~a fourth~~
another layer comprising dielectric material over ~~said the second-layer comprising polysilicon~~
prior to ~~said-forming said the third-layer comprising barrier material~~.

8. (Currently Amended) The method of claim 7, wherein ~~said-forming said the~~
~~fourth-layer~~ comprising dielectric material comprises depositing TEOS.

9. (Currently Amended) The method of claim 7, wherein ~~said-forming said the~~
~~fourth-another~~ layer comprising dielectric material comprises depositing silicon dioxide.

10. (Cancelled)

11. (Currently Amended) The method of claim ~~10~~27, wherein ~~said-disposing forming~~
the layer comprising electrically conductive silicidable material comprises ~~disposing forming a~~
layer comprising cobalt.

12. (Cancelled)

13. (Currently Amended) The method of claim ~~12~~27, wherein ~~said~~-annealing is effected by heating at least ~~said the semiconductor material~~ polysilicon to a temperature of about 400°C. to about 800°C.

14. (Currently Amended) The method of claim ~~12~~27, wherein ~~said~~-annealing is effected by heating at least ~~said the semiconductor material~~ polysilicon to a temperature of about 450°C. to about 600°C.

15. (Currently Amended) The method of claim 13, further comprising removing an unreacted portion of ~~said the~~ electrically conductive silicidable material.

16. (Currently Amended) The method of claim 15, wherein ~~said~~-removing ~~said the~~ unreacted portion is effected without substantially removing reacted electrically conductive silicidable material.

17. (Currently Amended) The method of claim ~~16~~28, wherein ~~said~~-removing ~~said the~~ unreacted portion is effected without substantially removing ~~said the~~ barrier material.

18. (Currently Amended) The method of claim 15, wherein ~~said~~-removing ~~said the~~ unreacted portion is effected ~~with an~~ with a hydrochloric/peroxide mixture solution.

19. (Cancelled)

20. (Cancelled)

21. (Currently Amended) The method of claim ~~20~~3, further including removing ~~said the third layer comprising barrier material~~ after ~~said~~-forming ~~said the~~ silicide contact.

22. (Currently Amended) The method of claim 21, wherein ~~said~~-removing ~~said the~~ third layer comprising barrier material is effected without substantially removing ~~said the~~ silicide contact.

23. (Currently Amended) The method of claim 22, wherein ~~said~~-removing ~~said the~~ third-layer comprising barrier material is effected without substantially removing ~~said the~~ first layer comprising dielectric material.

24. (Currently Amended) The method of claim 21, wherein ~~said~~-removing ~~said the~~ third-layer comprising barrier material comprises substantially completely removing ~~said the~~ barrier material.

25. (Currently Amended) The method of claim 21, wherein ~~said~~-removing is effected with an ammonia/peroxide mixture solution.

26. (Currently Amended) The method of claim 493, wherein ~~said~~-forming ~~said the~~ third-layer comprising barrier material comprises preventing ~~said the~~ electrically conductive silicidable material from reacting with ~~said the~~ semiconductor material through at least one of a void and an imperfection in ~~said the~~ first-layer comprising dielectric material.

27. (New) The method of claim 1, wherein forming the silicide contact comprises: forming a layer comprising polysilicon over the layer comprising dielectric material; and forming a layer comprising electrically conductive silicidable material over the layer comprising polysilicon; and annealing the polysilicon and the electrically conductive silicidable material.

28. (New) The method of claim 3, further comprising removing an unreacted portion of the electrically conductive silicidable material.